



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,863	11/30/2001	Larry R. Satek	37219	6768

4249 7590 08/20/2003

CAROL WILSON
BP AMERICA INC.
MAIL CODE 5 EAST
4101 WINFIELD ROAD
WARRENVILLE, IL 60555

EXAMINER

NGUYEN, TAM M

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 08/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/997,863

Applicant(s)

SATEK ET AL.

Examiner

Tam M. Nguyen

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 1764

DETAILED ACTION

Response to Amendment

The rejection of claims 1-10, 19 and 20 under 35 USC § 112 is withdrawn by the examiner in view of the amendment filed on June 20, 2003.

The rejection of claims 1-20 under 35 USC § 102(b) anticipated by Kaminsky is withdrawn by the examiner in view of the amendment filed on June 20, 2003.

A new final rejection follows.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

Art Unit: 1764

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Kaminsky et al. (6,080,905).

Kaminsky discloses a process from removing impurities (including propadiene) from an olefinic feed comprising ethylene and propylene by contacting the feed with an adsorbent in an adsorption zone wherein the Kaminsky adsorbent is the same as the claimed adsorbent and the adsorption zone of Kaminsky is operated at the same conditions as the claimed conditions. The spent adsorbent is then regenerated with hydrogen to release the impurities from the adsorbent. It is noted that Kaminsky does not specifically disclose that propadiene is absorbed from the olefinic feed and the purified effluent from the adsorption zone contains less than about 1 ppm by volume of propadiene (diene) impurities. However, the process of Kaminsky is essentially the same as the claimed process. Therefore, it would be expected that propadiene would be absorbed along with acetylene from the feed and the effluent from the adsorption zone would have less than 1 ppm by volume of propadiene as claimed (See entire patent; especially col. 3, lines 30-35)

~~Kaminsky does not disclose that the feedstock comprises about 1 percent by volume of propadiene based upon the total amount of olefin present. However, it appears that the amount of propadiene is not a critical component in the process. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the~~

Art Unit: 1764

process of Kaminsky by using an olefinic feedstock comprising the claimed amount of propadiene because one of skill in the art would use a feedstock comprising any amount of propadiene including the claimed amount and it would be expected that the results would be the same or similar when using a feedstock comprising .9, 1, or 3 volume percent in the process of Kaminsky.

Claims 1-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Kaminsky et al. (6,124,517).

Kaminsky discloses a process from removing impurities (including propadiene) from an olefinic feed comprising ethylene and propylene by contacting the feed with an adsorbent in an adsorption zone wherein the Kaminsky adsorbent is the same as the claimed adsorbent and the adsorption zone of Kaminsky is operated at the same conditions as the claimed conditions. The spent adsorbent is then regenerated with hydrogen to release the impurities from the adsorbent. It is noted that Kaminsky does not specifically disclose that propadiene is absorbed from the olefinic feed and the purified effluent from the adsorption zone contains less than about 1 ppm by volume of propadiene (diene) impurities. However, the process of Kaminsky is essentially the same as the claimed process. Therefore, it would be expected that propadiene would be absorbed along with acetylene from the feed and the effluent from the adsorption zone would have less than 1 ppm by volume of propadiene as claimed. (See entire patent; especially col. 3, lines 42-50)

Kaminsky does not disclose that the feedstock comprises about 1 percent by volume of propadiene based upon the total amount of olefin present. However, it appears that the amount of propadiene is not a critical component in the process. Therefore, it would have been obvious to

Art Unit: 1764

one having ordinary skill in the art at the time the invention was made to have modified the process of Kaminsky by using an olefinic feedstock comprising the claimed amount of propadiene because one of skill in the art would use a feedstock comprising any amount of propadiene including the claimed amount and it would be expected that the results would be the same or similar when using a feedstock comprises 0.9, 1, or 3 volume percent in the process of Kaminsky.

Response to Arguments

The argument that both '905 and '517 references do not disclose that propadiene is separated from the olefinic feed as claimed is not persuasive because both references identify that propadiene is an impurity in the feed and the processes of both references are essentially the same as the claimed process. Therefore, it would be expected that propadiene is absorbed when the olefinic feed is contacted with the adsorbent as claimed.

The argument that all of the requirements of 35 U.S.C 103 (c) are met in the present case is noted. However, the argument is not persuasive because the rejections in Office Action No. 6 are under 35 U.S.C 102 (b).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1764

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

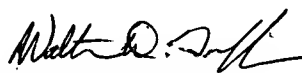
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam M. Nguyen whose telephone number is (703) 305-7715. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-5408 for regular communications and (703) 305-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Tam M. Nguyen
Examiner
Art-Unit-1764

TN
August 14, 2003


Walter D. Griffin
Primary Examiner